1999 WSF TRAVEL SURVEY ANALYSIS AND RESULTS — APPENDIX C SURVEY DATABASE DOCUMENTATION

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APPENDIX C — SURVEY DATABASE DOCUMENTATION

SURVEY ADMINISTRATION AND CODING

This section provides some background on the sampling plan, administration, and coding of the WSF travel survey, which will help the data user understand how the data were collected and analyzed. Readers seeking additional information regarding these topics are referred to the main report as well as the *WSF 1999 Travel Survey: Technical Report of Methods* dated March 2000 and prepared by Nustats for Washington State Ferries as part of the overall travel survey project.

Survey Periods and Sampling Plan

The survey sampling plan called for administering a travel survey to a sample of weekday and Sunday ferry users during the month of May. May is the ideal month for surveying, not only for comparability to the May 1993 travel survey, but also because daily ridership levels in May most closely approximate annual average daily ridership, capturing both regular users and some of the recreational users that frequent the system during the peak summer season. Each route was surveyed for specific survey periods on one midweek day and one Sunday. A specific sampling plan was developed to obtain travel information from users during the weekday PM peak period, the remaining non-peak PM hours of the day (PM non-peak period), and Sunday. For the PM peak period, survey questionnaires were offered to all persons age 15 or older on every vessel sailing departing between 3 and 7 PM on the particular Tuesday, Wednesday, or Thursday that each route was surveyed. PM non-peak survey period riders were surveyed on the same days as the PM peak period survey from a sample of at least 50% of the vessel sailings that occurred during the non-peak PM hours. When appropriately expanded, the two weekday survey periods combined represent the travel patterns for the PM half day ridership.[1]

On Sunday, the six hour block of consecutive vessel sailings that maximized boardings on each route were sampled, with survey questionnaires offered to each rider age 15 or older. Differences in schedules and travel patterns means that routes may have been surveyed at somewhat different times or for a differing number of vessel sailings. The Sunday survey is intended to provide additional information about weekend ferry use without expanding the survey data to be representative of overall Sunday or weekend travel patterns.

Survey Administration

With a few notable exceptions, the 1999 WSF Travel Survey was administered as planned during the three survey periods. Logistical issues and the desire to avoid the atypical travel patterns on the Memorial Day holiday weekend caused the Sunday survey of the Edmonds-Kingston route to be pushed back to the first weekend in June. Bad luck plagued the

[1] Two exceptions are the international and domestic San Juan Island routes, which were expanded to daily ridership, thus making no distinction between the PM peak and PM non-peak periods.

weekday survey administration on the Fauntleroy-Vashon-Southworth triangle routes. A vessel broke down just after the weekday survey was underway, disrupting service and altering schedules as remaining vessels were reallocated in an attempt to balance service to the three locations. This caused a number of passengers to change their travel plans and/or become disgruntled, both of which reduced the survey response well below target levels. It also foiled efforts to collect detailed boarding and alighting counts by terminal and vessel in order to produce ridership control totals for the three individual routes by sailing.

In light of these problems, a re-survey of the Fauntleroy-Vashon-Southworth triangle routes was scheduled for a weekday in early June. As fate would have it, a similar service disruption occurred on this day as well, resulting in an inadequate rider sample and a sub-par response rate. Recognizing that the next opportunity to re-survey this route on a weekday would put the date well into the peak season and school year summer break, and not wanting to test the good-will of riders on this route with yet another survey, it was decided to postpone a further re-survey of the Fauntleroy-Vashon-Southworth routes until the end of September. On Tuesday, September 28, the Fauntleroy-Vashon-Southworth route trio was re-surveyed along with the Seattle-Vashon passenger-only route. The passenger-only route was included for calibration purposes to properly account for the many riders on the Southworth-Vashon route make the transfer to and from the passenger-only route to downtown Seattle via Vashon.

Usable Survey Records

Nearly 50,000 questionnaires were distributed system-wide to weekday and Sunday passengers on the sampled vessel sailings, and over 18,000 of these were returned. Field screening for completeness and accuracy reduced this yield slightly to 17,895 questionnaires available for computer scan coding of question responses. Computerized scanning of survey questionnaires was employed for all survey responses except for the reported addresses for the rider's trip origin, trip destination, and home location, which were manually entered for subsequent latitude/longitude geocoding. After data processing and iterative, thorough quality review, there were 15,092 general usable survey records for the three combined survey periods, and 14,732 trip table usable records.

Survey records deemed usable for tabulation and analysis have been divided into two categories: ***general usable*** and ***trip table usable***. A general usable record is defined as survey data for one respondent that is judged complete and valid for analysis purposes. To meet the general usable criteria, a survey record must include:

- Indication of the trip purpose;
- Indication of the boarding method as in-vehicle or walk-on, and if the latter, further indication of the access mode to the departure ferry terminal and the egress mode from the arrival ferry terminal; ***and***
- Geocodable address information for the respondent's trip origin and destination that are either:
  - Sufficiently dissimilar geographically to be consistent with the one-way trip (ferry crossing) surveyed; ***or***

– Geographically similar but with a reported trip purpose of sightseeing, indicating that the respondent made a continuous round-trip, beginning and ending at the same ferry terminal without alighting at another location.

Because the survey questionnaire was designed to gather data about a one-way trip, it was necessary to exclude those records for the small percentage of respondents who erroneously provided information about a round-trip from the general usable category. One exception was made for respondents who indicated that they were making a continuous round-trip with the sole purpose of "sightseeing", effectively boarding and subsequently alighting at the same ferry terminal. For these cases, the ferry component of a respondent's one-way trip and round-trip are indistinguishable.

The set of trip table usable records further restricts the general usable survey records by eliminating the above round-trip exception concerning those respondents making a continuous "sightseeing" purpose round-trip.

DATABASE VARIABLE DOCUMENTATION

After initial database coding of the survey questionnaire responses, a series of quality control measures were undertaken to minimize response inaccuracies and address potential coding errors. Throughout this process, new variables were added to the weekday and Sunday databases to provide added detail to better analyze the data, and also to correct for respondent inaccuracies/problems in questionnaire completion. Other variables were created to identify, segment, or verify information such as usable survey records, direction of travel, and origin and destination information.

Using the WSF Travel Survey Databases

There are two database files for the WSF Travel Survey, one for the Sunday survey and one for the weekday survey (both PM peak and non-peak periods.) These databases were created and analyzed using SPSS for Windows, a software package designed for statistical data analysis. Tabulations were created in both SPSS and Microsoft Excel for Windows, and portions of the databases were exported to ArcView for Windows for geographical analysis. The databases are available distribution in SPSS, Excel, and dBase DBF formats as well.

The weekday database file contains records for those individuals who filled out a questionnaire during either the PM peak or PM non-peak survey periods on one of the 13 routes (see Section 2.1.1 in Chapter 2 of the main report for definitions of the survey periods.) The Sunday database contains records for those individuals who filled out a survey questionnaire for one of the 13 routes during the defined Sunday survey period.

Both databases contain direct responses coded from each individual questionnaire, as well as created data fields used to aggregate data responses into category format, or otherwise make the raw survey data more useful for analysis purposes. Key variables for use in filtering the database to obtain the desired respondent information include: SVPERIOD, USABLE, TT_USE, ROUTE, DIR, BOARD, and XFACTOR. A full list of database variables and their defined values follows.

- The **SVPERIOD** variable is used to sort respondents into "weekday PM peak," and "weekday PM non-peak," survey time periods within the single weekday database. Both databases contain all three survey period designations (PM peak, PM non-peak and Sunday) for consistency. However, not all data categories are present in each database, because the original, comprehensive database was split into weekday and Sunday for ease of use.

- The **O_D FLAG** variable is used to evaluate the degree of accuracy in respondent reporting of trip origin and destination information and is used to filter out responses with trip origins and destinations that are incomplete, inaccurate or geographically too similar. Use of this variable is key to applying the criteria for identifying ***general usable*** and ***trip table usable*** records. In general, most data analysis can be undertaken filtering on the **USABLE** variable defined below, unless the data user will be analyzing special cases or applying the information in a travel demand forecasting model.

- The **USABLE** variable corresponds to the ***general usable*** definition above, and is used to identify those individual survey records that meet certain completeness criteria and are suitable for most analysis and tabulation purposes. To meet the ***general usable*** criteria "usable" record, the survey record must have completed responses to four critical parts for respondents boarding in a vehicle, and six critical parts for respondents boarding as walk-ons or pedestrians. In-vehicle boarders were required to have answered the trip purpose and boarding method questions, and have provided geocodable address information for their trip origin and destination. Walk-on passengers were required to report their trip purpose, boarding method, mode of access and egress to and from the ferry terminals, and have provided geocodable origin and destination information.

- The **TT_USE** variable further limits the ***general usable*** records to the category of ***trip table usable*** by filtering out those survey records that have a geographically similar trip origin and destination but had still met the ***general usable*** criteria because the respondent's reported trip purpose was sightseeing, indicative of a continuous round-trip beginning and ending at the same ferry terminal.

- The **XFACTOR** variable is used to correctly expand the survey responses to the appropriate actual ridership values observed for the designated weekday survey period (PM peak or PM non-peak). In order to analyze the database and obtain the correct proportion of responses by boarding mode and direction of travel, the expansion factor variable must be applied to correctly weight tabulated results. To correctly expand/ weight the survey records in SPSS, the XFACTOR variable must be applied to the records being analyzed using the "weight cases" operator under the "Data" heading of the SPSS command menu. To correctly expand the survey records in Excel, the XFACTOR variable must be applied as a multiplicative operator while using the pivot table tabulation function. The Sunday database includes fields for the expansion factor variables, but these variables do not contain data, as complete survey period ridership data by mode and direction were not available for developing expansion targets. Therefore, Sunday data cannot be expanded and analysis results should be viewed as representative of travel patterns and distributions of Sunday survey respondents, rather than for survey period ridership as a whole. The main cause of sample bias that could

result from using unexpanded Sunday data would be in tabulating results that might vary by boarding mode, since in-vehicle riders, especially vehicle passengers, were less likely to fill out the survey (lower response rate) and are thus underrepresented in the survey results.

Other more generalized variables used to filter the database include: ROUTE, DIR, and BOARD.

- The **ROUTE** (or **ROUTE_NUM**) variables are used to sort responses by specific ferry routes.
- The **DIR** (or **DIR_NUM**) variables are used to filter responses based on the (vessel) direction of travel.
- The **BOARD** (or **AGR_BRD**) variables are used to filter responses based on respondent boarding method.

Variable Names and Definitions

A list of all variables included in the database are presented below.

SERNO = Questionnaire Serial Number
This variable provides a unique identifier for each survey response.

CHECK = Completed Questionnaire on Other Ferry Ride
Provides a Yes or No response for completion of a questionnaire on an earlier ferry ride.

SVPERIOD = Survey Period Flag
Variable used to delineate between Weekday PM Peak, Weekday PM Non-Peak, and Sunday sailing times. Weekday "peak" sailing times are designated from 3 to 7pm and weekday non-peak sailing times are roughly from 12pm to final sailing, excluding the PM Peak. Coding is as follows:

1) Weekday PM Peak
2) Weekday PM Non-Peak
3) Sunday

SAILTIME = Vessel Run Start Time
Records the scheduled sailing time of the surveyed vessel.

ROUTE = Route
Listing of ferry routes, with the following two letter origin and destination notations are:

Route Code	*Route Name*
PD-TA	PT. DEFIANCE—TAHLEQUAH
SO-VA	SOUTHWORTH—VASHON
FA-VA	FAUNTLEROY—VASHON
FA-SO	FAUNTLEROY—SOUTHWORTH
SE-BR	SEATTLE—BREMERTON
SE-SO	SEATTLE—SOUTHWORTH VIA VASHON
SE-BA	SEATTLE—BAINBRIDGE ISLAND
ED-KI	EDMONDS—KINGSTON
MU-CL	MUKILTEO—CLINTON
PT-KE	PORT TOWNSEND—KEYSTONE
AN-SJ	ANACORTES—SAN JUAN ISLANDS
AN-SI	ANACORTES/ISLANDS—SIDNEY, B.C.
SE-BR-P	SEATTLE—BREMERTON (PASSENGER-ONLY)
SE-VA	SEATTLE—VASHON (PASSENGER-ONLY)

DIR = Direction
Direction surveyed ferry is traveling. Responses are as follows:
East West

LEG = Route Leg
This variable is used for San Juan and Sidney routes to identify bi-directional trip terminal pairs, and for the modeled "Seattle-Southworth" route to indicate on which route (Seattle-Vashon or Southworth-Vashon) the original record came from:

Route Leg Code	*Route Leg Terminals*
A/F	Anacortes - Friday Harbor
A/L	Anacortes - Lopez
A/S	Anacortes - Shaw
A/SI	Anacortes - Sidney
F/SI	Friday Harbor - Sidney
L/F	Lopez - Friday Harbor
L/O	Lopez - Orcas
L/S	Lopez - Shaw
O/F	Orcas - Friday Harbor
O/SI	Orcas - Sidney
S/F	Shaw - Friday Harbor
S/O	Shaw - Orcas
SE-VA	Seattle - Vashon
SO-VA	Southworth - Vashon

BOARD = Boarding Method – Question 13
Respondents were asked to report how they boarded the ferry. Available responses are as follows:

1) Walked
2) Bicycled
3) Driver of Vehicle
4) Passenger in Vehicle
9) No Answer

AGR_BRD = Aggregate Boarding Method – Created from Question 13
This variable combines the walk-on and bike-on passengers into a single group and combines the vehicle drivers and vehicle passengers into a single group.

1) Walk-Board
2) Vehicle Board
9) No Answer

RFACTOR = Response Factor
Calculated value based on the number of completed surveys per surveyed vessel divided by the total number of passengers who boarded the ferry (per mode: driver, passenger, walk/bike).

BFACTOR = Boarding Factor
Calculated value based on the number of surveyed ferries divided by the total number of ferry sailings during the time period in question. Generally, all PM Peak ferry sailings were surveyed, so the boarding factor for PM Peak sailings will most always be one. The boarding factor is typically more important for Non-Peak sailings.

XFACTOR = Expansion Factor
Calculated value of the response factor multiplied by the boarding factor, used to expand results to account for the entire population.

O_D_FLAG = Origin/Destination Flag
Variable provides information on the level of geo-coding accuracy of origin/destination data for use in data tabulation and mapping. Coded responses are as follows:

1) Good Origin & Destination
2) Origin & Destination too similar, but trip purpose of 7 (sight-seeing)
3) Good Origin, but Incomplete Destination Info
4) Good Destination, but Incomplete Origin Info
5) Incomplete Origin & Destination
6) Origin & Destination Too Similar
7) Origin or Destination Inconsistent with Surveyed Vessel Direction

USABLE = Usable Flag (Complete)
Variable provides information on each survey's completeness and the accuracy of the listed origin and destination. In order for a survey to be complete specific questions must have been answered appropriately and the geo-coding process must have yielded an O_D Flag of 1 or 2 to be considered valid. Coded responses are as follows:

0) Not Usable (Invalid)
1) Usable (Valid Complete)

TT_USE = Trip Table Usable
Variable provides information on the degree of accuracy for the listed origin and destination as well as completeness. In order for a survey to be considered "trip-table" usable the geo-coding must have yielded and O_D Flag of 1 and specific questions must have been answered appropriately. Trip Table Usable records are a subset of Usable records and are coded as follows:

0) Not Usable
1) Trip Table Usable (O_D Flag = 1)

DIR_NUM = Numeric Direction
Numeric listing of east or west direction.

1) East
2) West

ROUTENUM = Numeric Route
Numeric listing of ferry routes, with the following 2 letter origin and destination notations (see ROUTENUM for route names):

PD-TA = 1	MU-CL = 15
SO-VA = 4	PT-KE = 17
FA-VA = 5	AN-SJ = 19
FA-SO = 7	AN-SI = 29
SE-BR = 9	SE-BR-P = 41
SE-BA = 11	SE-VA = 43
ED-KI = 13	SE-SO = 47

VEH_TYPE = Vehicle Type
Of the respondents who reported they had either drove or had rode with someone to board the ferry vessel, they were asked to report the kind of vehicle they were either driving or riding in. Available responses were as follows:

1) Auto, SUV, Minivan, or Pick-up
2) Motorcycle
3) Camper or RV
4) Truck
5) Vanpool Program Vehicle
6) Public Transit Bus
7) Other Bus
9) No Answer/Refused/Don't Know

DESTTYPE = Destination Type
Provides coded destination types in 3 categories:

1) Home
2) Work/School
3) Some other place
9) A response of 9 was coded if the respondent did not select one of the three categories.

DESTTERM = Destination Terminal – Question 2
Provides information to accurately Q.C. boarding and alighting counts performed by surveyors. Responses are coded as follows:

1) Fauntleroy
2) Southworth
3) Vashon
4) Seattle
5) Anacortes
6) Lopez
7) Shaw
8) Orcas
9) Friday Harbor
10) Sidney
11) Keystone
12) Port Townsend
13) Mukilteo
14) Clinton
15) Kingston
16) Edmonds
17) Bainbridge
18) Bremerton
19) Pt. Defiance
20) Tahlequah
99) Not able to determine (none in database)

DEST_TAZ = Traffic Analysis Zone (TAZ) for Destination Location
Provides a coded TAZ, which is used for origin/destination mapping purposes.

DESTDIST = Created Destination District
Provides a coded district for mapping origin/destination locations and allows for corridor-based analysis.

ORIGTYPE = Origin Type
Provides coded origin types in 3 categories:

1) Home
2) Work/School
3) Some other place
9) A response of 9 was coded if the respondent did not select one of the three categories.

ORIGTERM = Terminal where Questionnaire was Distributed
Provides information to accurately Q.C. boarding and alighting counts performed by surveyors. Responses are coded as follows:

0) On Vessel
1) Fauntleroy
2) Southworth
3) Vashon
4) Seattle
5) Anacortes
6) Lopez
7) Shaw
8) Orcas
9) Friday Harbor
10) Sidney
11) Keystone
12) Port Townsend
13) Mukilteo
14) Clinton
15) Kingston
16) Edmonds
17) Bainbridge
18) Bremerton
19) Pt. Defiance
20) Tahlequah
99) Not able to determine (none in database)

ORIG_TAZ = Traffic Analysis Zone (TAZ) for Origin Location
Provides a coded TAZ, used as a Q.C. measure and for origin/destination mapping purposes.

ORIGDIST = Created Origin District
Provides a coded district for mapping origin/destination locations and allows for corridor-based analysis.

TRANSFER = Transfer to Another Ferry – Question 6a
Respondents report if they are transferring to another ferry before reaching their final destination. This question was included only for the San Juan and Fauntleroy Routes. Responses for this question are as follows:

1) Yes
2) No
3) Transfer Assumed
4) No Transfer Assumed
9) No Response.

XFERTERM = If Transferring, Final Destination Terminal – Question 6b
Respondents marked at which terminal their final ferry ride would take them. Responses for this question are as follows:

2) Southworth
4) Seattle
5) Anacortes
6) Lopez
7) Shaw
8) Orcas
9) Friday Harbor
99) No Answer

TRIPPURP = Trip Purpose
Respondents were asked to report for what purpose they are taking the surveyed ferry trip. Allowed responses for this question are as follows:

1) To/from regularly scheduled work or school
2) To/from business-related activity
3) To/from medical appointment
4) To/from personal business
5) To/from social or recreational activity
6) To/from shopping
7) To/from sight-seeing
8) Other purpose
9) No Answer

AGTRPPRP = Aggregated Trip Purpose
This variable was created from the allowed trip purpose categories to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) Work/School/Business Related
2) Medical Appt./Personal Business/Other
3) Social/Recreational/Shopping/Sight-seeing
4) No Answer

RTRIPSEG = Trip Segment - Question 8
This variable reports whether the respondent is going to a destination or returning from a destination and what part of a "round-trip" this specific ferry trip pertains to. Responses to this question are as follows:

1) First half
2) Second half
9) No Answer

RT2_MODE = First Half How Return – Question 8
This variable reports the respondents answer to the question of how they will return if this is the 1st half of their trip (presumably round-trip). Responses to this question are as follows:

1) Same ferry route
2) Not using ferry system
3) Different ferry route
9) No Answer

RT2_DAY = First Half When Return – Question 8
This variable reports the respondents answer to the question of when they will return if this is the 1st half of their trip (presumably round-trip). Responses to this question are as follows:

1) Today
2) Some other day
9) No Answer

RT1_MODE = Second Half How Get There – Question 8
This variable reports the respondents answer to the question of how they got to where they were going if this is the 2nd half of their trip (presumably round-trip). Responses to this question are as follows:

1) Same ferry route
2) Not using ferry system
3) Different ferry route
9) No Answer

RT1_DAY = Second Half When Get There – Question 8
This variable reports the respondents answer to the question of when they got to their previous destination if this is the 2nd half of their trip (presumably round-trip). Responses to this question are as follows:

1) Today
2) Some other day
9) No Answer

TICKTYPE = Type of Ticket Used to Board Ferry – Question 9
Respondents were asked to report the type of ticket they used to board the surveyed vessel. Coded responses are as follows:

1) Free
2) Combined Ferry/Bus
3) Motorcycle
4) Auto/Driver, full fare
5) Auto/Driver, frequent user coupon
6) Passenger with bicycle
7) Passenger, full fare
8) Passenger, senior discount
9) Passenger, half fare discount
10) Passenger, frequent user coupon
11) Recreational Vehicle
12) Truck longer than 20 feet
13) Employer-subsidized 1 month pass
14) Other
99) No Answer

AGR_TICK = Aggregate Ticket Type – Modified Question 9
This variable was created from the allowed ticket type categories to form groups responses that are more conducive to data analysis and display. Created responses are as follows:

1) Passenger, Full Fare
2) Passenger, Frequent User Coupon
3) Passenger, Discounted Fare
4) Ferry/Bus or Other Monthly Pass
5) Passenger Fare Not Required, Other, or No Answer
6) Auto/Driver, Full Fare
7) Auto/Driver, Frequent User Coupon
8) Oversize Vehicle
9) Motorcycle

WAITTIME = Wait Time – Question 10
Respondents were asked to report the amount of time they waited to board the surveyed vessel. In most cases this was the respondents preferred vessel. In instances were no wait-time was recorded a value of 999 was used.

WAIT_CAT = Categorized Wait Time – Question 10
This variable was created from the reported wait times to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 0 – 10 minutes
2) 11 – 30 minutes
3) 31 – 60 minutes
4) 61 – 90 minutes
5) >90 minutes
9) No Answer

TRIPFREQ = Ridership Frequency – Question 11
Respondents were asked to report the number of ONE-WAY rides they had taken by ferry in the past 7 days. Respondents were provided with a box to input their response and were also allowed the following coded responses:

Responses varied from 1 ride to 55 rides.
77) First Ride in Past Year
88) First Ride Ever
99) No Answer

FREQ_CAT = Categorized Ridership Frequency
This variable was created from the reported frequency responses form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 1st Ride in Past 7 Days (includes 1st ride in past year an d 1st ride ever)
2) 2 – 5 Rides in Past 7 days
3) 6 – 9 Rides in Past 7 days
4) 10 or More rides in Past 7 days
9) No Answer

BSVC2BLK = Weighted Bus Response – Service within 2 Blocks of Destination (Question 12)
Weighted response for survey respondents who reported that "transit service within 2 blocks of their home or destination" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a requested "single response" question.

BSVCBOTH = Weighted Bus Response – Service at Both Ends of Ferry Route (Question 12)
Weighted response for survey respondents who reported that the availability of "transit service at both ends of ferry route" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

BSEAMLSS = Weighted Bus Response - Seamless Connection between Ferry & Bus (Question 12)
Weighted response for survey respondents who reported that a "seamless connection" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

BPDPASS = Weighted Bus Response – Employer Paid/Subsidized Bus Pass
Weighted response for survey respondents who reported that an "employer paid or subsidized bus-pass" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

BMOREPNR = Weighted Bus Response – More Park-and-Ride Lots/Spaces Available (Question 12)
Weighted response for survey respondents who reported that "more park-and-ride lots/spaces" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

NONE_NA = Weighted Bus Response – None of the Above & No Answer (Question 12)
Weighted response for survey respondents who reported either "None of the Above" or did not provide an answer to the question. Weighting of responses was required to account for multiple responses to a "single response" question.

BMORE_PO = Weighted Bus Response – More Passenger Only Service (Question 12)
Weighted response for survey respondents who reported that "more passenger only service" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

BLWRPNR$ = Weighted Bus Response – Lower Park-and-Ride Rates (Question 12)
Weighted response for survey respondents who reported that "lower park-and-ride lot rates" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

BPNRINFO = Weighted Bus Response – More Park-and-Ride Information (Question 12)
Weighted response for survey respondents who reported that "more park-and-ride information" would make it easier to ride the bus to and from the ferry. Weighting of responses was required to account for multiple responses to a "single response" question.

B_OTHER = Weighted Bus Response – Write in Response for "Other" Responses (Question 12)
Weighted response for survey respondents who reported some "other" response that did not fit into one of the above noted categories. Weighting of responses was required to account for multiple responses to a "single response" question.

ACC_MODE = Access Mode – Question 13a
Walk-board respondents were asked to report how they arrived at the ferry/dock area. Available responses are as follows:

1) Bicycled
2) Walked
3) Drove Vehicle
4) Rode with Someone
5) Bus/Shuttle
6) Dropped Off
9) No Answer/Refused

ACC_BUS = Access Bus Company – Question 13a
Respondents were asked which transit agency they used to access the ferry/dock area, if they arrived via a bus or shuttle. Coded responses are as follows:

1) Kitsap Transit
2) King Co. Metro Transit
3) Island Transit
4) Community Transit
5) Pierce Transit
6) Jefferson Transit
7) Everett Transit
8) Other
9) No Answer

ACC_BUSO = Other Bus Company (Question 13a)
This text variable allows for other bus company responses than those coded above.

ACC_PARK – Access Parking (Question 13b)
Respondents were asked to report where they parked their vehicle, if they drove to the ferry terminal, but walked or biked onto the ferry. The category of "Other Paid Parking" was created to account for those persons who chose either "none of the above" or did not provide an answer, but did however, provide the amount unit and the cost paid for parking. For this pattern of response, it was assumed that the respondent parked, but the parking space/location did not fit into the provided categories. Coded responses are as follows:

1) Ferry terminal area parking
2) Off-site park-and-ride lot
3) Other parking lot or metered space
4) None of the above
5) Other Paid Parking
9) No Answer/Refused

ACC_PNR = Access Park-and-Ride (Question 13b)
Respondents were asked to report at what park-and-ride they parked, if they did in-fact use a park-and-ride lot. Coded responses were as follows:

1) Keypoint Junction
2) McWilliams Road
3) Westside
4) Eastside
5) Full Gospel Assembly Church
6) Emmanuel Lutheran Church
7) Christ Memorial Church
8) Poulsbo Junction
9) Poulsbo Nazarene Church
10) Suquamish Community Congregational United Church
11) Kountry Korners
12) Bayside Community Church
13) Agate Pass
14) Bainbridge Alliance
15) Bethany Lutheran Church
16) Rolling Bay Presbyterian Church
17) Port Orchard Armory
18) Harper Free Evangelical Church
19) Grace Bible Church
20) Olalla Valley Fire Station
21) Mullenix Road
22) March Point
23) George Hopper
24) Couperville P&R
25) Greenbank P&R
26) Bayview P&R
27) Clinton P&R
28) Clinton Dock
29) Soundview Shopper P&R
97) Other
99) No Answer/Refused/Don't Know

ACC_PNRO = Other Park-and-Ride Location (Question 13b)
This text variable allows for other park-and-ride location responses than those coded above.

ACCPUNIT = Access Terminal Parking Unit (Question 13c)
Respondents were asked to report the cost, base on a time period, to park their vehicle at any of the locations listed under ACC_PARK. This variable notes the time basis; the coded responses are as follows:

1) Hour
2) Day
3) Monthly
4) Year
9) No Answer/Refused/Don't Know

ACCPPAID = Access Terminal Parking Amount (Question 13c)
Respondents were asked to report the amount required to park their vehicle at any of the locations listed under ACC_PARK in conjunction with the time period reported under ACPUNIT. In addition to the various amounts reported the follows responses are included in the database:

.00 = Free
999.00 = No Answer/Refused

ACCDLYPD – Access Parking Paid in Daily Format (Refinement of Question 13c)
This is a created variable, based on the response to Question 13c, designed to change each response to a daily paid parking amount in order to provide a valid base of comparison when calculating average parking costs. Parking amounts were modified in the following manner:

- Hourly, Daily and Unknown Unit amounts were assumed to equal the daily amount. With the assumption that most ferry riders noting an hourly unit, provided the amount required for the entire time needed to park; it was also assumed that those passengers who did not report the unit, but did report an amount also provided the amount required for the entire time.
- Monthly units were divided by 21 to approximate a daily amount.
- Yearly units were divided by 260 to approximate a daily amount.
- Passengers who reported parking in Question 13b (response of 1, 2, or 3), but did not provide unit or amount information were assumed to park for free. As it was assumed that most riders who did park but did not pay, would not take the time to write in free or otherwise note that they did not have to pay for parking.
- Passengers who said they parked, provided a parking unit, but did not provide the cost of parking were coded as 999.

EGR_MODE = Egress Mode (Question 13d)
Walk-board respondents were asked to report how they would reach their final destination after exiting the ferry terminal. Available responses are as follows:

1) Bicycle
2) Walk
3) Drive Vehicle
4) Ride with Someone
5) Bus/Shuttle
6) Picked Up
9) No Answer/Refused

EGR_BUS = Egress Bus Company (Question 13d)
Respondents were asked which transit agency they were going to use depart from the ferry terminal, if they were departing via bus or shuttle. Coded responses are as follows:

1) Kitsap Transit
2) King Co. Metro Transit
3) Island Transit
4) Community Transit
5) Pierce Transit
6) Jefferson Transit
7) Everett Transit
8) Other (Specify)
9) No Answer

EGR_BUSO = Other Bus Company (Question 13d)
This text variable allows for other bus company responses than those coded above.

EGR_PARK – Egress Parking (Question 13e)
Respondents were asked to report where they parked their vehicle, if they were going to pick-up a vehicle after leaving the ferry terminal, but walked or biked off of the ferry. The category of "Other Paid Parking" was created to account for those persons who chose either "none of the above" or did not provide an answer, but did however, provide the amount unit and the cost paid for parking. For this pattern of response, it was assumed that the respondent parked, but the parking space/location did not fit into the provided categories. Coded responses are as follows:

1) Ferry terminal area parking
2) Off-site park-and-ride lot
3) Other parking lot or metered space
4) None of the above
5) Other Paid Parking
9) No Answer/Refused

EGR_PNR = Egress Park-and-Ride (Question 13e)
Respondents were asked to report at what park-and-ride they were going to, if they did in-fact use a park-and-ride lot. Coded responses were as follows:

1) Keypoint Junction
2) McWilliams Road
3) Westside
4) Eastside
5) Full Gospel Assembly Church
6) Emmanuel Lutheran Church
7) Christ Memorial Church
8) Poulsbo Junction
9) Poulsbo Nazarene Church
10) Suquamish Community Congregational United Church
11) Kountry Korners
12) Bayside Community Church
13) Agate Pass
14) Bainbridge Alliance
15) Bethany Lutheran Church
16) Rolling Bay Presbyterian Church
17) Port Orchard Armory
18) Harper Free Evangelical Church
19) Grace Bible Church
20) Olalla Valley Fire Station
21) Mullenix Road
22) March Point
23) George Hopper
24) Couperville P&R
25) Greenbank P&R
26) Bayview P&R
27) Clinton P&R
28) Clinton Dock
29) Soundview Shopper P&R
97) Other
99) No Answer/Refused/Don't Know

EGR_PNRO = Other Park-and-Ride Location (Question 13e)
This text variable allows for other park-and-ride location responses than those coded above.

EGRPUNIT = Egress Terminal Parking Unit (Question 13f)
Respondents were asked to report the cost, base on a time period, to park their vehicle at any of the locations listed under EGR_PARK. This variable notes the time basis; the coded responses are as follows:

1) Hour
2) Day
3) Monthly
4) Year
9) No Answer/Refused/Don't Know

EGRPPAID = Egress Terminal Parking Amount (Question 13f)
Respondents were asked to report the amount required to park their vehicle at any of the locations listed under EGR_PARK in conjunction with the time period reported under EGRPUNIT. In addition to the various amounts reported the follows responses are included in the database:

.00 = Free
999.00 = No Answer/Refused

EGRDLYPD – Egress Parking Paid in Daily Format (Refinement of Question 13c)
This is a created variable, based on the response to Question 13c, designed to change each response to a daily paid parking amount in order to provide a valid base of comparison when calculating average parking costs. Parking amounts were modified in the following manner:

- Hourly, Daily and Unknown Unit amounts were assumed to equal the daily amount. With the assumption that most ferry riders noting an hourly unit, provided the amount required for the entire time needed to park; it was also assumed that those passengers who did not report the unit, but did report an amount also provided the amount required for the entire time.
- Monthly units were divided by 21 to approximate a daily amount.
- Yearly units were divided by 260 to approximate a daily amount.
- Passengers who reported parking in Question 13b (response of 1, 2, or 3), but did not provide unit or amount information were assumed to park for free. As it was assumed that most riders who did park but did not pay, would not take the time to write in free or otherwise note that they did not have to pay for parking.
- Passengers who said they parked, provided a parking unit, but did not provide the cost of parking were coded as 999.

AVO = Categorized Vehicle Occupancy (Question 13h)
This variable was created from the individual reported vehicle occupancy responses to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 1 Person/SOV
2) 2 Persons
3) 3 Persons
4) 4 Persons
5) 5+ Persons
9) No Answer/Don't Know/Refused

PRILOAD = Priority Loading Status (Question 13i)
Respondents were asked to report if their vehicle received priority loading as a registered ferry car/vanpool, on a bus, or as a special purpose/emergency trip. Coded responses are as follows:

1) Yes
2) No
9) Don't Know/No Answer

INDRVHH = Same Household as Driver (Question 13j)
Vehicle passenger respondents were asked to report if they lived in the same household as the driver of the vehicle. Coded responses are as follows:

1) Yes
2) No
9) Don't Know/No Answer

VEHAVAIL = Categorized Vehicle Availability (Question 14)
This variable was created from the individual responses regarding vehicle availability to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 1 Vehicle
2) 2 Vehicles
3) 3 Vehicles
4) 4 Vehicles
5) 5 or More Vehicles
9) No Answer/Don't Know/Refused

HHSIZECAT = Categorized Household Size (Question 15)
This variable was created from the individual responses regarding household size to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 1 Person
2) 2 People
3) 3 People
4) 4 People
5) 5 People
6) 6 or More Persons
9) No Answer/Don't Know/Refused

HH_DRVRS = Categorized Licensed Drivers per Household (Question 16)
This variable was created from the individual responses regarding the number of licensed drivers to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) 1 Person
2) 2 People
3) 3 People
4) 4 People
5) 5 or More Persons
9) No Answer/Don't Know/Refused

VEHPDRVR = Vehicles per HH Driver (Question 14 / Question 16)
The number of vehicles was divided by the number of licensed household drivers to provide additional demographic data on ferry riders for comparison to general demographic data.

AGE = Categorized Respondent Age (Question 17)
This variable was created to form grouped responses that are more conducive to data analysis and display. Created response categories are as follows:

1) <18
2) 18 to 24
3) 25 to 34
4) 35 to 44
5) 45 to 54
6) 55 to 64
7) 65+
9) No Answer/Refused

SEX = Respondents Gender (Question 18)
Respondents were asked to report their gender. Coded responses are as follows:

1) Male
2) Female
9) No Answer/Refused

ALL_OCC = All Occupations Merged (Modified Version of Question 19)
To better tabulate and analyze the multiple responses provided by respondents, this variable was created that merges all of the selected occupational choices by each respondent into a single variable category. Coded responses are as follows:

1) Employed
2) Student
3) Military Personnel
4) Employed & Student
5) Employed & Military Personnel
6) Student & Military Personnel
7) Employed, Student & Military Personnel
8) None
9) No Answer

OCCUP_1 = Occupation 1 (Question 19)
As designed the questionnaire allowed for multiple responses (a single respondent could have checked "Employed" and also checked "Student"), but due to database design each possible answer needs a separate variable for each response. To account for the possibility of multiple responses, there are three OCCUP variables , which were then merged to create the ALL_OCC variable in order to document all the possible combined responses checked by each survey respondent. Possible responses are as follows:

1) Employed
2) Student
3) Military Personnel
4) None
9) No Answer/Refused

OCCUP_2 = Occupation 2 (Question 19)
As designed the questionnaire allowed for multiple responses (a single respondent could have checked "Employed" and also checked "Student"), but due to database design each possible answer needs a separate variable for each response. To account for the possibility of multiple responses, there are three OCCUP variables , which were then merged to create the ALL_OCC variable in order to document all the possible combined responses checked by each survey respondent. Possible responses are as follows:

1) Employed
2) Student
3) Military Personnel
4) None
9) No Answer/Refused

OCCUP_3 = Occupation 3 (Question 19)
As designed the questionnaire allowed for multiple responses (a single respondent could have checked "Employed" and also checked "Student"), but due to database design each possible answer needs a separate variable for each response. To account for the possibility of multiple responses, there are three OCCUP variables , which were then merged to create the ALL_OCC variable in order to document all the possible combined responses checked by each survey respondent. Possible responses are as follows:

1) Employed
2) Student
3) Military Personnel
4) None
9) No Answer/Refused

HHINCOME = Household Income (Question 20)
Respondents were asked to select one of the listed household income brackets. Allowed responses are as follows:

1) Less than $15,000
2) $15,000 to $34,999
3) $35,000 to $49,999
4) $50,000 to $74,999
5) $75,000 to $99,999
6) More than $100,000
9) No Answer/Refused

NAVYFLAG = USS Abraham Lincoln Connection (Question 21)
Respondents were asked if their ferry ride was associated with the work on the USS Abraham Lincoln at the PSNS in Bremerton. Coded responses are as follows:

1) Yes
2) No
9) No Answer/Refused

ADA = ADA Eligible (Question 22)
Respondents were asked to report if they were eligible for transportation services covered by the Americans with Disabilities Act. Allowed responses are a follows:

1) Yes
2) No
9) No Answer/Refused

REG_WIN = Registered for Drawing
Coding to administer the prize drawing offered to those who participated. Coded responses are as follows:

1) Yes
2) No

HOME_ADR = Home Address - Drawing
Administrative field for prize drawing.

HOME_APT = Apartment Number - Drawing
Administrative field for prize drawing.

HOMECITY = Home City - Drawing
Administrative field for prize drawing.

HOME_ST = Home State - Drawing
Administrative field for prize drawing

HOME_ZIP = Zip Code - Drawing
Administrative field for prize drawing

HOME_GEO = Household Geo-coding Status - Drawing
Secondary check for accurate geo-coding of home origin/destination, if respondent reported they were either going to or coming from home. Provides information pertaining to the level of detail available for origin/destination mapping. Four responses are allowed for this variable:

O = Outside TAZ coverage area
M = Matched and within TAZ coverage area
U = Unmatched
C = Canada TAZ Coverage

HOME_X = Household X Coordinate - Drawing
Provides an X-coordinate for listed home address, based on geo-coding process. Used as a secondary check for accurate geo-coding of home origin/destination.

HOME_Y = Household Y Coordinate - Drawing
Provides a Y-coordinate for listed home address, based on geo-coding process. Used as a secondary check for accurate geo-coding of home origin/destination.

HOME_TAZ = Household TAZ (Traffic Analysis Zone) - Drawing
Provides a coded TAZ based on the home address - also used as a secondary check of geo-coding accuracy.

DESTCITY = Destination City (Question 2)
Write in response, requesting city/area of final destination.

DEST_ZIP = Destination City/Area Zip Code (Question 2)
Write in response, requesting zip-code of final destination.

DESTNAME = Destination Place Name (Question 2)
Write in response, used as a back-up if City information was not provided or destination was a rural area.

DEST_ADR = Destination Street Address (Question 2)
Write in response, requesting street address information for geo-coding purposes.

DEST_XST = Destination Cross Streets (Question 2)
Write in response, used as a back-up, if an exact street address was not given or unavailable, for geo-coding purposes.

DEST_GEO = Destination Geocoding Status (Question 2)
Provides information pertaining to the level of detail available for destination mapping. Four responses are allowed for this variable:

O = Outside TAZ coverage area
M = Matched and within TAZ coverage area
U = Unmatched
C = Canada TAZ Coverage

DEST_X = Destination X Coordinate (Question 2)
Provides an X-coordinate based on geo-coding process.

DEST_Y = Destination Y Coordinate (Question 2)
Provides a Y-coordinate based on geo-coding process.

DEST_GAD = Destination Geo-Coded Address Point (Question 2)
Geocoded address point, if different than address or location provided.

DEST_ZON = Destination Geo-Coded Zone (Question 2)
Zone centroid location by zip-code.

DESTGZIP = Destination Geo-Coded Zip Code (Question 2)
Lists the zip-code for the destination found through the geo-coding process, if different than address/location provided.

DESTGCTY = Destination Geo-Coded City (Question 2)
Lists the destination city found through the geo-coding process, if different than address/location provided.

DESTCFIP = Destination County FIP's Code (Question 2)
Lists the County FIP's code for the destination city/area.

DEST_GQC = Destination Geo-Coding Quality Control Flag
Lists the degree of effort required to accurately geo-coding the destination information provided by the respondent. Listing is as follows:

1) City and zip-code provided match geo-coded city and zip.
2) Zip-Code provided matches geocoded zip-code.
3) Geo-coded point manually verified.
4) Location geo-coded based on city and zip-code matching look-up table.
5) Manually matched geo-code, based on similar place names/addresses.
6) City and zip-code listed by respondent matches one found in look-up table.
7) Zip-code provided by respondent matches one found in look-up table.
8) City provided by respondent matches a city from the look-up table.
9) City an zip-coded provided for Seattle, match city-zip table.
10) Manually matched record, based on city provided.

ORIGCITY = Origin City (Question 4)
Write in response, requesting city/area where the respondent just came from.

ORIG_ZIP = Origin Zip Code (Question 4)
Write in response, requesting zip-code from where they came from before reaching the ferry.

ORIGNAME = Origin Place Name (Question 4)
Write in response, used as a back-up if City information was not provided or origin was a rural area.

ORIG_ADR = Origin Street Address (Question 4)
Write in response, requesting street address information for geo-coding purposes.

ORIG_XST = Origin Cross Streets (Question 4)
Write in response, used as a back-up, if an exact street address was not given or unavailable, for geo-coding purposes.

ORIG_GEO = Origin Geocoding Status (Question 4)
Provides information pertaining to the level of detail available for origin mapping. Four responses are allowed for this variable:

O = Outside TAZ coverage area
M = Matched and within TAZ coverage area
U = Unmatched
C = Canada TAZ Coverage

ORIG_X = Origin X Coordinate (Question 4)
Provides an X-coordinate based on geo-coding process.

ORIG_Y = Origin Y Coordinate (Question 4)
Provides a Y-coordinate based on geo-coding process.

ORIG_GAD = Origin Geo-Coded Address Point (Question 4)
Geocoded address point, if different than address or location provided.

ORIG_ZON = Origin Geo-Coded Zone (Question 4)
Zone centroid location by zip-code.

ORIGGZIP = Origin Geo-Coded Zip Code (Question 4)
Lists the zip-code for the origin found through the geo-coding process, if different than address/location provided.

ORIGGCTY = Origin Geo-Coded City (Question 4)
Lists the origin city found through the geo-coding process, if different than address/location provided.

ORIGCFIP = Origin County FIP's Code (Question 4)
Lists the County FIP's code for the origin city/area.

ORIG_GQC = Origin Geo-Coding Quality Control Flag (Question 4)
Lists the degree of effort required to accurately geo-coding the origin information provided by the respondent. Listing is as follows:

1) City and zip-code provided match geo-coded city and zip.
2) Zip-Code provided matches geocoded zip-code.
3) Geo-coded point manually verified.
4) Location geo-coded based on city and zip-code matching look-up table.
5) Manually matched geo-code, based on similar place names/addresses.
6) City and zip-code listed by respondent matches one found in look-up table.
7) Zip-code provided by respondent matches one found in look-up table.
8) City provided by respondent matches a city from the look-up table.
9) City an zip-coded provided for Seattle, match city-zip table.
10) Manually matched record, based on city provided.

BUS_1RAW = First Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUS_2RAW = Second Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUS_3RAW = Third Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUS_4RAW = Fourth Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUS_5RAW = Fifth Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUS_6RAW = Sixth Multiple Response Category (Question 12)
This variable allows for a multiple number of responses, but only notes which response was checked by the survey respondent. Therefore, a single respondent could have checked "transit service within 2 blocks" and also checked "seamless connection." To account for this multiple bus response variables were created to document all the possible responses checked by each survey respondent. Possible responses are as follows:

1) Transit stop within 2 blocks of home/destination
2) Transit service available at both ends of ferry route
3) Seamless connection between ferry and buses
4) Bus pass paid/subsidized by employer
5) More park-and-ride lot/space available
6) None of the above
7) Late night passenger only service
8) Lower park-and-ride rates
9) Park-and-ride lot information
97) Other (Specify)
99) Refused

BUSOTHRA = "Other" Specified Responses for Transit Improvements (Question 12)
This text variable allows for any write in responses that did not fit into the 8 coded categories.

AVO_RAW = Vehicle Occupancy (Question 13h)
Variable reports the number of persons (including the respondent) traveling with the respondent, except for those traveling via bus or shuttle. A value label of 99 was used for those respondents who chose not to answer the question or did not know the number of persons traveling in the vehicle.

VEH_RAW= Number of Vehicles Available in Household (Question 14)
Respondents were asked the number of working motor vehicles available for use by their household. In addition to the number values given by respondents, a value of 99 was assigned for those who did not answer the question.

HHSZ_RAW = Household Size (Question 15)
Respondents were asked to report the number of persons living in their household. In addition to the number values given by respondents, a value of 99 was assigned for those who did not answer the question.

LICN_RAW = Licensed Drivers (Question 16)
Respondents were asked to report the number of licensed drivers living in their household. In addition to the number values given by respondents, a value of 99 was assigned for those who did not answer the question.

AGE_RAW = Respondents Age (Question 17)
Respondents were asked to report their age. In addition to the number values given by respondents, a value of 99 was assigned for those who did not answer the question.